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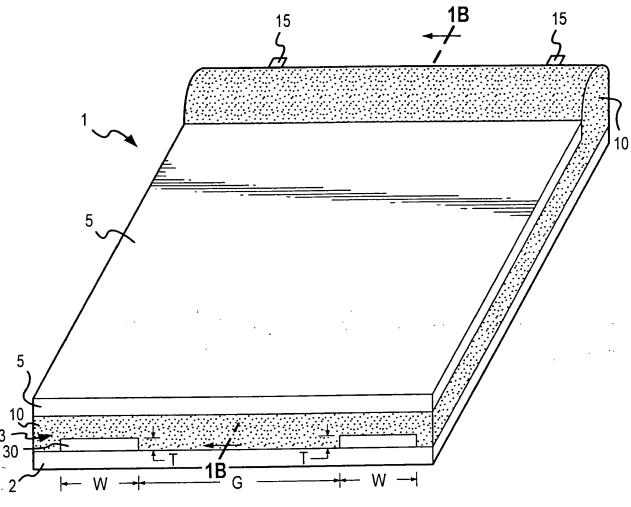


FIG.1A

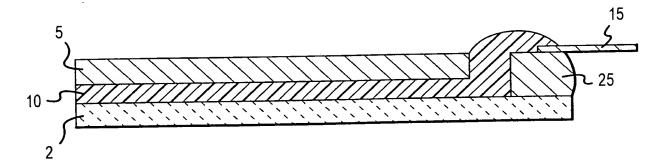


FIG.1B

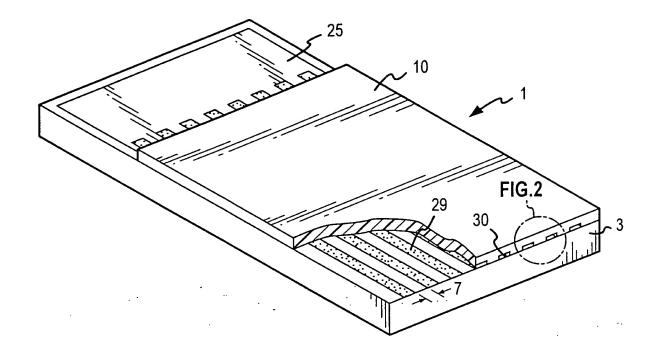


FIG.2A

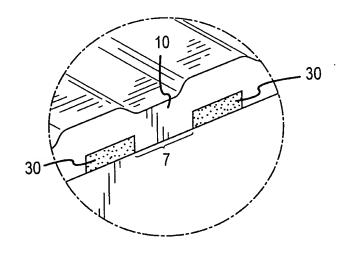


FIG.2

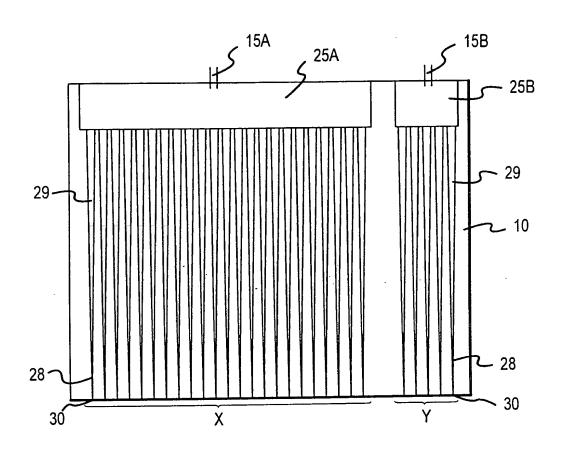
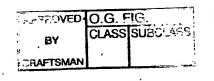


FIG.3



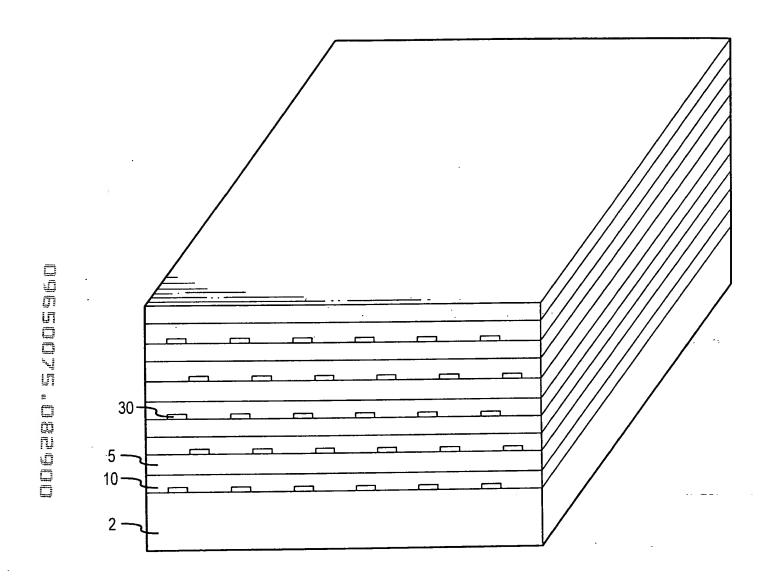
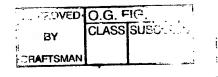


FIG.4A



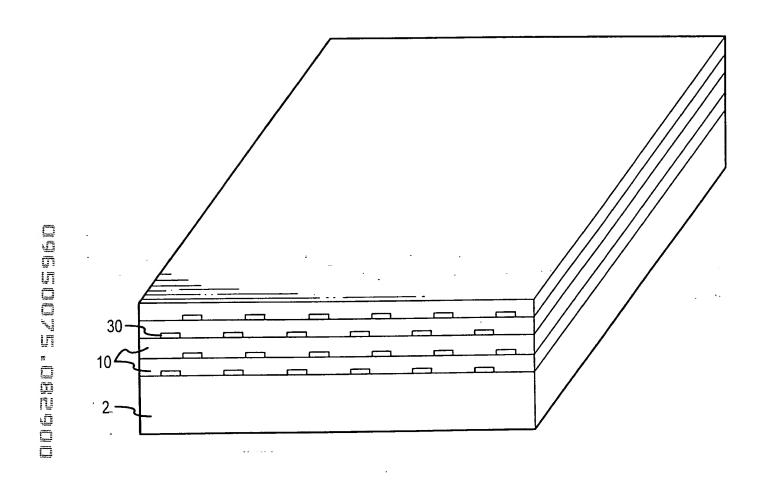


FIG.4B

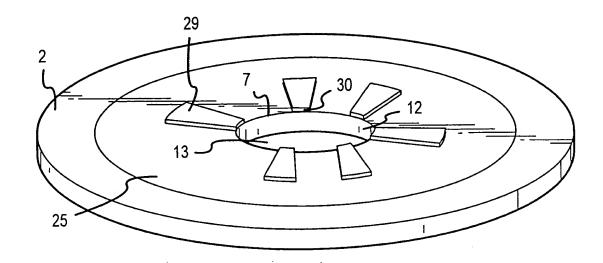


FIG.5A

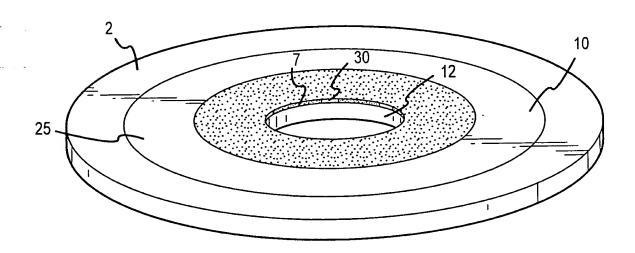


FIG.5B

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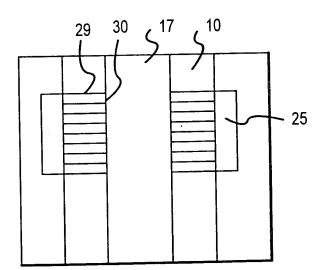


FIG.6B

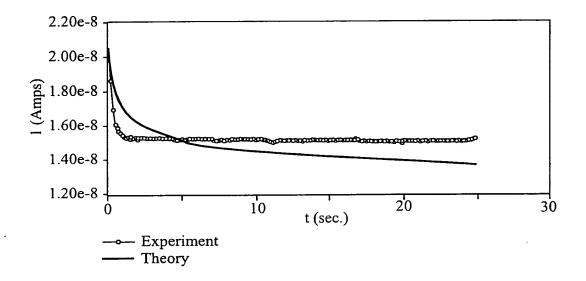


FIG. 7

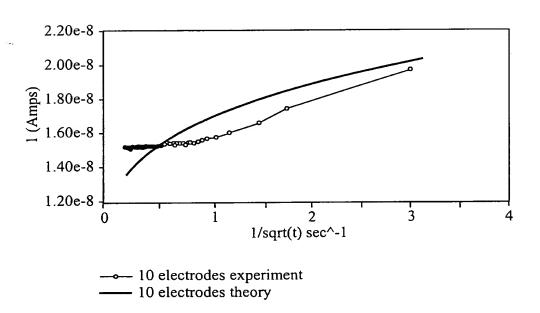


FIG. 8

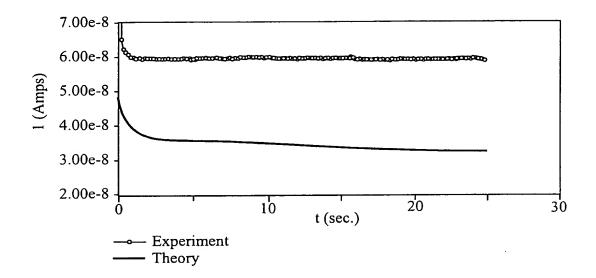


FIG. 9

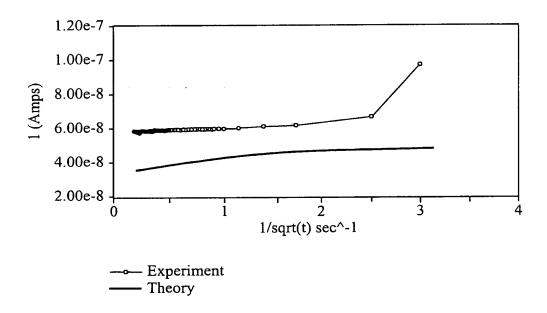
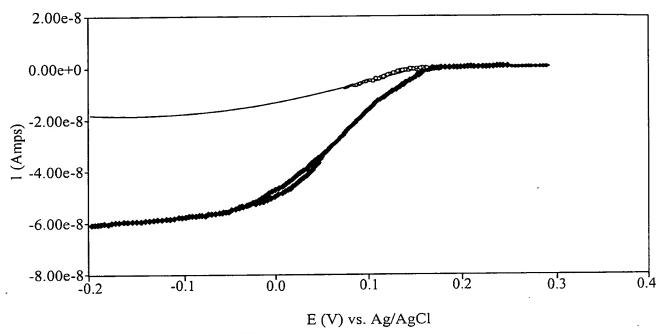
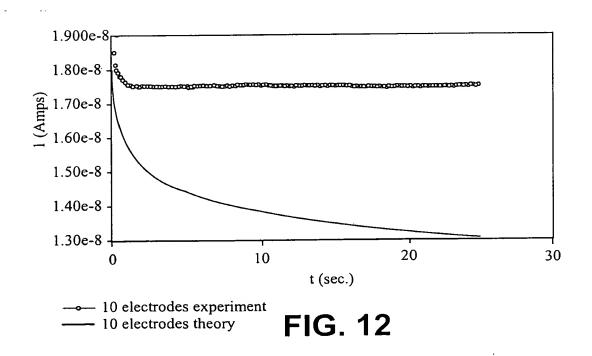


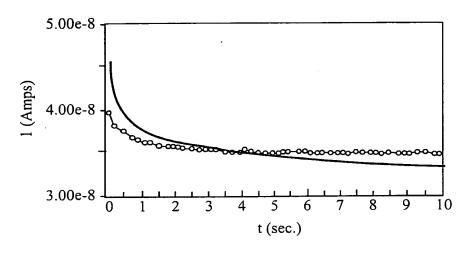
FIG. 10



- Au band array (10 electrodes)
- ◆ Au band array (24 electrodes)

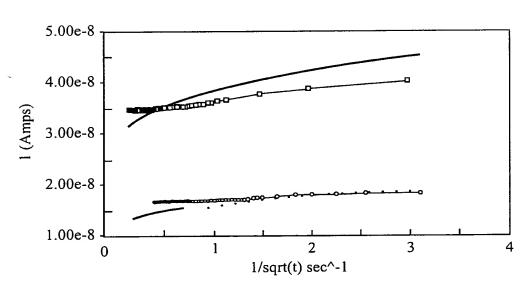
FIG. 11





— Experiment
— Theory

FIG. 13



—— Theory 24 electrodes

___ Experiment 24 electrodes

o Experiment 10 electrodes

Theory 10 electrodes

FIG. 14

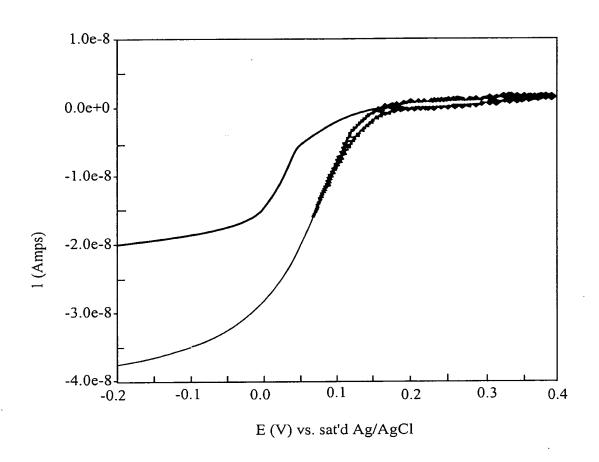
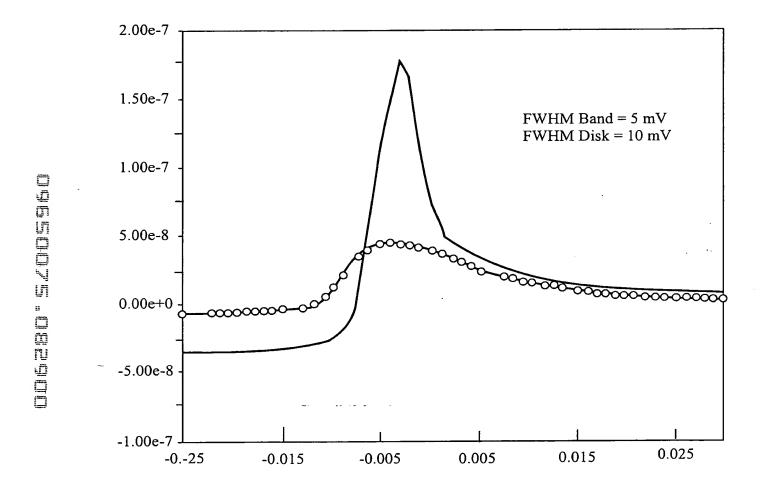


FIG. 15

- Pt band array (10 electrodes)
- ◆ Pt band array (24 electrodes)

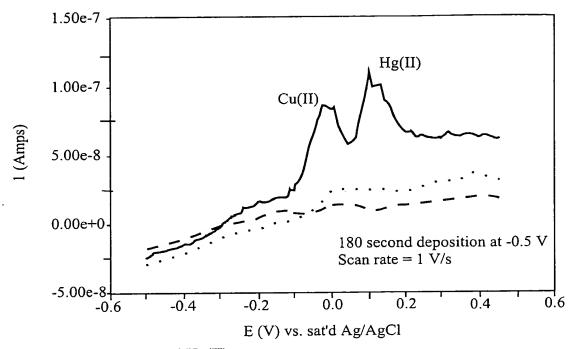


—o— 25 μm Pt electrode

——— 24 Pt Band electrodes (10 μm x 0.1172 μm)

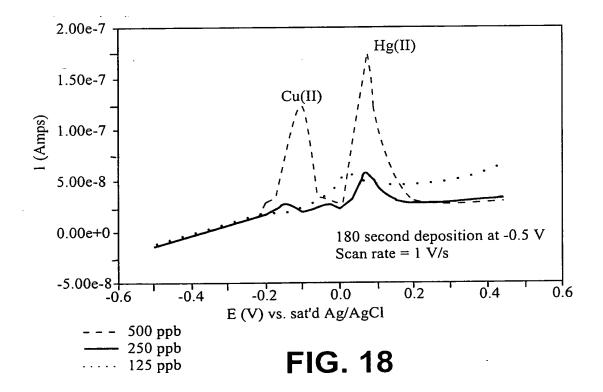
FIG.16

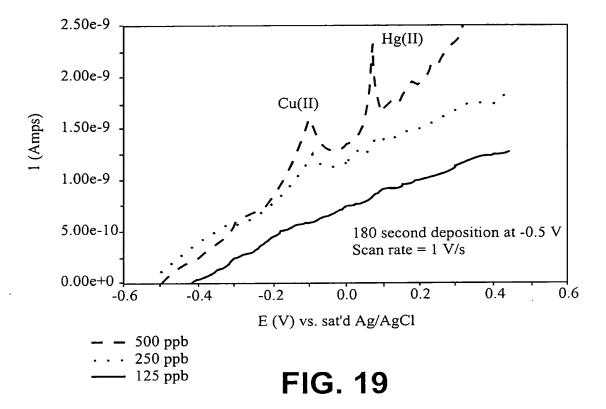




500 ppb Cu(II) and Hg(II)
 250 ppb Cu(II) and Hg(II)
 125 ppb Cu(II) and Hg(II)

FIG. 17





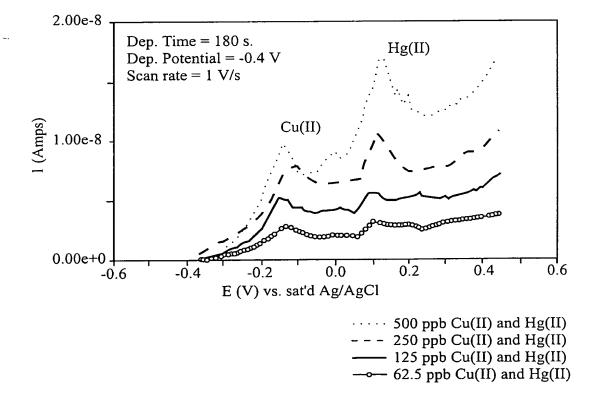
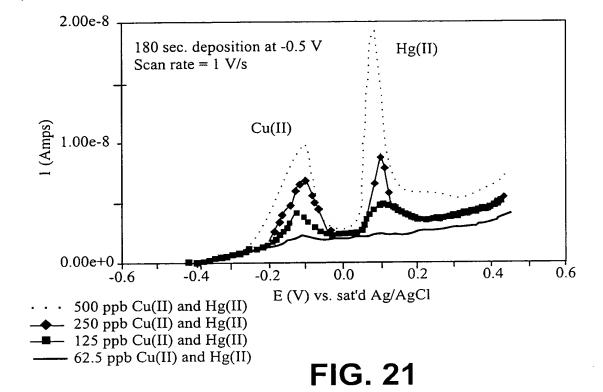


FIG. 20



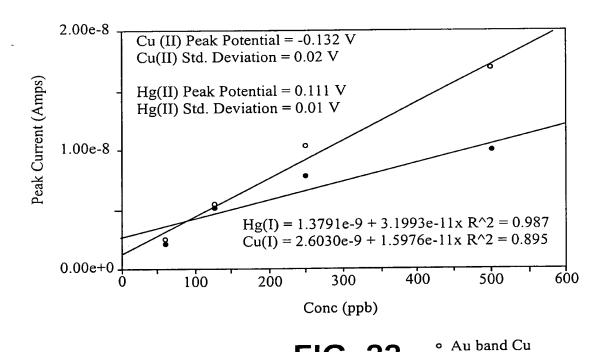


FIG. 22

Au band Hg

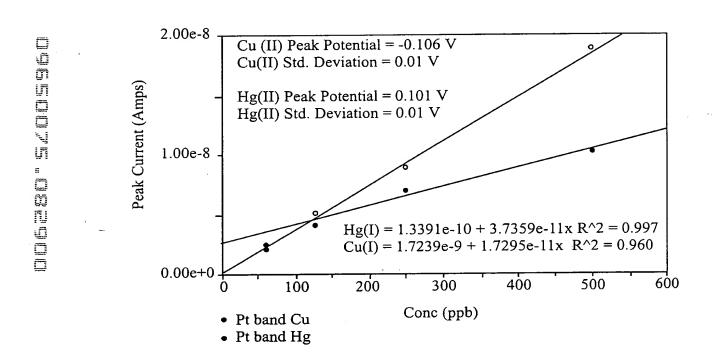


FIG. 23